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Gencore version 4.5

Om protein - protein search, using sw model

Run on: January 7, 2002, 15:37:21 ; Search time 154.38 Seconds

Title: US-08-569-749-2

perfect score: 3277

Sequence: 1 MHKTASQRLFPGPSYQNIKS.....LRRCPICRGIIKGTVRTFLS 618

Scoring table: BLASTSUM62

Gapop 10.0 , Gapext 0.5

Searched: 52463 seqs, 74073290 residues

Total number of hits satisfying chosen parameters: 522463

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_1101,*

1: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1980.DAT;*

2: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1981.DAT;*

3: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1982.DAT;*

4: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1983.DAT;*

5: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1984.DAT;*

6: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1985.DAT;*

7: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1986.DAT;*

8: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1987.DAT;*

9: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1988.DAT;*

10: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1990.DAT;*

11: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1991.DAT;*

12: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1992.DAT;*

13: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA1993.DAT;*

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21: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA2001.DAT;*

22: /\$IDS2/ecqdata/geneseq/geneseq/geneseq/AA2001.DAT;*

Result No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	DB ID	Description
1	3277	1.00	618	18 AAM19746 Human inhibitor of Human c-IAP1. Hom
2	3277	100.0	618	18 AAM13545 Human cellular inh
3	3277	100.0	618	20 AAX33988 Human apoptosis
4	3247	99.1	618	18 AAM19533 Human HMAP-2 prote
5	3247	99.1	618	19 AAM69296 Murine c-IAP, Mus
6	2728	83.2	612	18 AAM13555 Murine HMAP-2 prot
7	2724	83.1	612	19 AAM69299 Mouse apoptosis in
8	2654	81.0	591	18 AAM19506 Human inhibitor of
9	2353	71.8	604	18 AAM19717 Human c-IAP2. Hom
10	2353	71.8	604	18 AAM13546 Human cellular inh
11	2353	71.8	604	20 AAY15203

RESULT 1

ID AAM19746 standard; Protein: 618 AA.

AC AAM19746;

XX DT 16-SEP-1997 (first entry)

XX DE Human inhibitor of apoptosis protein homologue MHb.

XX Inhibitor of apoptosis protein; IAP; mammalian IAP homologue; MHb; KW degenerative disease; infectious disease; autoimmune disease; KW cancer; therapy; diagnosis.

XX OS Homo sapiens.

XX PH Key Location/Qualifiers

FT Region 46..113

FT Region /label=BIR

FT Region 184..250 /label=BIR

FT Region 269..337 /label=BIR

FT Region 569..606 /label=RING_finger

PN W09723501-A1.

PD 03-JUL-1997.

XX PR 20-DEC-1996; 96WO-AU00827.

PR 22-DEC-1995; 95AU-0007275.

human cellular inh

Human apoptosis in

Human HMAP-1 prote

Human inhibitor of

Murine HMAP-1 prot

Mouse apoptosis in

Human AP12-MLT chi

Angiogenesis conver

Mouse inhibitor of

Human apoptosis in

Human XIAP protein

Human XIAP protein

Mouse XIAP protein

Murine XIAP protein

Drosophila inhibitor

Drosophila mutant

Drosophila XIAP protein

Drosophila wild-type

Drosophila mutant

Drosophila mutant

Drosophila mutant

Drosophila mutant

Drosophila mutant

Drosophila mutant

Drosophila XIAP protein

Neuronal apoptosis

Neuronal acid sequence

Gonadotrophic horne

Human apoptosis in

Neuronal apoptosis

Gonadotrophic horne

Human apoptosis in

Human XIAP protein

PA	(AMRA-) AMRAD OPERATIONS PTY LTD.	Db	601	kpicrgqikgqvrtfis	618
XX					
PT					
XX					
PT					
XX					
DR	WPI: 1997-35096632.				
XX	N-PSDB; AAT72711.				
PS	Claim 8: Page 51-54; 136pp; English.				
XX					
CC	Mammalian IAP homologue B (MIHB) (AAW19746) is a human homologue of baculovirus inhibitor of apoptosis protein (IAP). Its amino acid sequence was deduced from a cDNA clone (see also AAT72711) isolated from a human foetal liver cDNA library using primers based on human EST sequences that resembled the BIR repeats of Oryzias pseudosugita baculovirus IAP. IAP homologues (see also AAW19745 and AAT1947-52) and their derivatives and chemical analogues can be used in methods for modulating apoptosis in animal cells, specifically for treatment, by inhibition, of degenerative and infectious disease or, by promotion, of cancer and autoimmune disease.				
CC					
CC					
XX	Sequence 618 AA:				
Query Match	Best Local Similarity 100.0%; Score 3277; DB 18; Length 618; Matches 618; Conservative 0; Mismatches 0; Indels 0; Gaps 0;				
Qy	1 MHTTASORLFPQPSVONKSMIMEDSTLSDWTSNNMKQKMYDSCCELYRMSTYSPFPAGV 60				
Db	1 mtktasqrlfpqspqyqkisimedstlswdnwnskqkkyfscelyrmstfpgv 60				
Qy	61 PVSRSALARAGYVSYNDVKYKPCCGIMLDNWAKLQDSDPIQKQLYPLSCSFIONVLSA 120				
Db	61 pvsrslaragyytqndvkvcfcgimldhkwkqdkhkpqkqklyfscfifpgv 120				
Qy	121 LGTSKSPNPSMNSPNSAHSPLTEHSSLFSGSYSSLSNPNTLSPRAVEDSSSRTPYSA 180				
Db	121 LGTSKSPNPSMNSPNSAHSPLTEHSSLFSGSYSSLSNPNTLSPRAVEDSSSRTPYSA 180				
Qy	181 MSTEEARFLYTHMMPFLPSLARAGYVIGRGRDVAFCFGGKLSNNPFPKDMSEH 240				
Db	181 msteearfllythmmpflpslaraqgyviggprdracfcggklsnnpfpkdmseh 240				
Qy	241 RRHPPNCPFENSLSTLRSISLUSKQTHAMRMRTPMWPSSVVPVPEQTLASAGFYVGR 300				
Db	241 rrhppnctfensltlrsisluskuqthamrmtfmywpssvvpvpeqtlasagfyvgr 300				
Qy	302 NPDYKFCGCCGGLKWCSDPDPVAKWFRCEFLINKGKGEFVDEIOPRPHLQL 360				
Db	301 nadvkcccdgqircwesgadpvhenvakwfpcreflirkmgqfetvaelqgryphileq 360				
Qy	361 SRSDFGEEDWADPPI1HGPGESSSEDAVNNTPVKAEGFNRDLYKOTVOSKIL 420				
Db	361 ssdtdgeedwadppi1hgpgeessedavnntpvkaelgnrdlykotvorskitt 420				
Qy	421 GENKTVNDVSLALNASEDEKREBEERKQKEMASDDSLIRNRNMAFLFQDTEVLPILD 480				
Db	421 genkvtndvslalnadekrekerekkqemmasddslirnrnmaflfqdtevlpid 480				
Qy	481 NLKANVNNKQEDIKQKTPQKRELDTILVKGWANANIFKNCLEKIDSTYKLF 540				
Db	481 nlkavninkqedikqktpqkreldtiilkvgwananifknclekdstlyklf 540				
Qy	541 VOKNMVYIPRDVSLSLQERLRLQERCCVQKMDKEVSVIFPQCHLYQECAPLR 600				
Db	541 vdknkyiptedvsglsleqirrlqeqertckvandkevsvvifpcghlyvcqecapsir 600				
Qy	601 KCPICRGLKTVTRFLS 618				
XX	Sequence 618 AA:				
Query Match	Best Local Similarity 100.0%; Score 3277; DB 18; Length 618; Matches 618; Conservative 0; Mismatches 0; Indels 0; Gaps 0;				
Qy	1 MHTTASORLFPQPSVONKSMIMEDSTLSDWTSNNMKQKMYDSCCELYRMSTYSPFPAGV 60				
Db	1 mtktasqrlfpqspqyqkisimedstlswdnwnskqkkyfscelyrmstfpgv 60				
Qy	61 PVSRSALARAGYVSYNDVKYKPCCGIMLDNWAKLQDSDPIQKQLYPLSCSFIONVLSA 120				
Db	61 pvsrslaragyytqndvkvcfcgimldhkwkqdkhkpqkqklyfscfifpgv 120				
Qy	121 LGTSKSPNPSMNSPNSAHSPLTEHSSLFSGSYSSLSNPNTLSPRAVEDSSSRTPYSA 180				

CC	(c-IAP-1). The antisense compounds may be used for diagnostics, therapeutics (for modulating the expression of c-IAP-1), prophylaxis (e.g. to prevent or delay infection, inflammation, or tumor formation) as research reagents (e.g. to distinguish between members of a biological pathway) and in kits. The present sequence represents the human cellular inhibitor of apoptosis-1.
CC	Sequence 618 AA:
CC	Query Match 100.0%; Score 3277; DB 20; Length 618;
CC	Best Local Similarity 100.0%; Pred. No. 1.3e-289; Matches 618; Conservative 0; Mismatches 0; Indels 0; Gaps 0
CC	1 MHHTASORLFPGSVQNTKSMIDSTISLDSWNTNSKURQKDYNSCELYRMSTYSPAGV 60
CC	Db 1 mhtasorlfpgsvqntksmidstisldswntnskurqkdyndsclyrmstyspagv 60
CC	61 PVSERSTLARAGFYYGVNDVKVFCGCCIMLDNWKIGDSPIQKHKLYPSCFIQLYVAS 120
CC	Db 61 pvsrstlaragfyygvndvkvcfcgimldnwkgdpsiqkqklypscfiqlyvas 120
CC	62 VDKNMVKYPTEDVSGSLERQRLQERCTCWCMDKEVSVFIPCGHLWVQECAPSLR 600
CC	Db 62 vdknmvkyptedvsgslerqrlqerctcwcmdkevsfvipcghlwvqecapslr 600
CC	63 481 NLLKANVINKERDIKOTQIQLQARLLIDILVKGNAANIFKNCIESTLTKNLF 540
CC	Db 63 481 nllkanvinkerdikotqiqlqarllidilvkgnaanifkncliestltnlf 540
CC	64 421 GENKYTVNDIVSALLNAEDEKREKEKEQAEAMSDDSLIRKRMALFOOLTCVPLID 480
CC	Db 64 421 genkytvndivsallnaedekrekekeqaeamsddslirkrmalfqoltcvplid 480
CC	65 421 rrbfpncpfclensletlrsisulsmothaarmrftmymppsvppqlasagfyyvr 300
CC	Db 65 421 rrbfpncpfclensletlrsisulsmothaarmrftmymppsvppqlasagfyyvr 300
CC	66 301 NDDVKCFCDCGLRWESEDPPVHEAKWPFRCFLIRMGQEVDETOGRYPHILEOLL 360
CC	Db 66 301 nddkcfcdcgllrcwesddppvhewakwpcrcflirkmgqevdetogrphileoll 360
CC	67 361 STSITTEBENADDPPIHFGGESESDAVMMTPVVKSALEMGRDLVKVOSHLTT 420
CC	Db 67 361 stsdgtgeendddpplihfggesssdavmmtpvksalemgrdlvkvoshltt 420
CC	68 421 GENKYTVNDIVSALLNAEDEKREKEKEQAEAMSDDSLIRKRMALFOOLTCVPLID 480
CC	Db 68 421 genkytvndivsallnaedekrekekeqaeamsddslirkrmalfqoltcvplid 480
CC	69 421 genkytvndivsallnaedekrekekeqaeamsddslirkrmalfqoltcvplid 480
CC	Db 69 421 genkytvndivsallnaedekrekekeqaeamsddslirkrmalfqoltcvplid 480
CC	70 481 NLLKANVINKERDIKOTQIQLQARLLIDILVKGNAANIFKNCIESTLTKNLF 540
CC	Db 70 481 nllkanvinkerdikotqiqlqarllidilvkgnaanifkncliestltnlf 540
CC	71 541 VDKNMVKYPTEDVSGSLERQRLQERCTCWCMDKEVSVFIPCGHLWVQECAPSLR 600
CC	Db 71 541 vdknmvkyptedvsgslerqrlqerctcwcmdkevsfvipcghlwvqecapslr 600
CC	72 601 KCPICRGIIKGTVRTFLS 618
CC	Db 72 601 kcpicrgiikgvtfls 618
CC	73 601 kcpicrgiikgvtfls 618
CC	RESULT 3
CC	AY333998 standard; Protein: 618 AA.
CC	AY333998: XX
CC	DT 26-Nov-1999 (first entry)
CC	XX Human cellular inhibitor of apoptosis-1 sequence.
CC	KW Cellulair Inhibitor of Apoptosis-1; antisense; diagnostic; therapeutic; C-IAP-1; prophylaxis; infection; inflammation; tumor formation.
CC	OS Homo sapiens.
CC	XX US5958772-A.
CC	XX PD 28-SEP-1999.
CC	XX 03-DEC-1998; 98US-0205204.
CC	XX 03-DEC-1998; 98US-0205204.
CC	XX (ISIS-) ISIS PHARM INC.
CC	XX AAW19583
CC	PT Bennett CF, Cowser LM, Ackermann EJ;
CC	XX WPI: 1999-56104747.
CC	DR N-PSDB; AAZ22143.
CC	PT Antisense compounds complementary to Cellular Inhibitor of Apoptosis-1 useful for e.g. diagnostics, therapeutics, and as research reagents.
CC	XX Example 13; Columns 41-46; 32pp; English.
CC	The invention provides antisense compounds of 8-30 nucleotides that inhibit the expression of human Cellular Inhibitor of Apoptosis-1

XX
OS Homo sapiens.
XX
FT Key Location/Qualifiers
Domain 46..113 /label= BIR-1
FT Domain 184..230 /label= BIR-2
FT Domain 269..316 /label= BIR-3
FT Domain 560..605 /label= Ring_zinc_finger
XX
PN W09706255-A2.
XX
PD 20-FEB-1997.
XX
PF 05-AUG-1996; 96W0-1B01022.
XX
PR 22-DEC-1995; 95US-0576956.
PR 04-AUG-1995; 95US-0511485.
XX
(UOTC-) UNIV OTTAWA.
XX
PI Baird S, Korneiuk RG, Liston P, Mackenzie AE;
XX
DR WPI; 1997-154267/14.
N-PSDB; AA770838.

PT Nucleic acid encoding an inhibitor of apoptosis polypeptide - used to inhibit apoptosis in e.g. HIV or AIDS patients, and for detection of susceptibility to apoptotic disease
PT XX
PS Claim 27: Page 75-77: 219PP; English.

CC Human XIAP, XIAP-1 and XIAP-2 and murine M-XIAP, M-XIAP-1 and M-XIAP-2 (AAW1581-85) are a new class of mammalian proteins that are inhibitors of apoptosis (IAP) and which are characterised by the presence of a long zinc finger domain (see also AAW1987) and at least one BIR (baculovirus IAP repeat) domain (see also AAW1958). The XIAP amino acid sequences were deduced from cDNA clones (AA770837 and AA770838) from a human liver library. IAP polypeptides can be expressed in host cells (in vitro or in vivo) and used in methods for treating diseases and disorders involving apoptosis, esp. in a human diagnosed as HIV-positive or as having AIDS, a neurodegenerative disease, a myelodysplastic syndrome or an ischemic injury, selected from myocardial infarction, stroke, reperfusion injury, or a toxin-induced liver disease.
XX
Sequence 618 AA;

Query Match 99.1%; Score 3247; DB 18; Length 618;
Best Local Similarity 95.4%; Pred. No. 7,26-28; 0; Mismatches 4; Indels 0; Gaps 0;
Matches 614; Conservative 0; MisMatches 4; Index 0;

QY 1 MTKTASDRIPPGPYQNKISMEDSITLSDWTNSNKQKVDYKDFSCLYRSTSTPAGV 60
DB 1 mtktasdrippgpyqnkismedsitslwtnsnkqkvdyscylmststpagv 60
DB 61 PYSERSLARAGFYTGVWUKWKGFCGGLMDNWLGKSPICQHOLYPSCEFQYNSAS 120
DB 61 pserslaragfytgvwukwkgfcgglmdnwlgkspicqhypsesfqlnitas 120
QY 121 LGTSKNTSPMRNSFAHSLSPLENSLFGSYSSLSPNPLSRAVEDISSRNPYSA 180
DB 121 lgtskntspmrnsfahsipletsifsgsllspnplnrasdissstnpysa 180
DB 181 MSTEERFLYTHMLPLTLSPELARAGFYTGVWUKWKGFCGGLMDNWLGKSPICQHOLYPSCEFQYNSAS 240
DB 181 msteerfltyhmlpltsplaragfytgvwukwkgfcgglmdnwlgkspicqhypsesfqlnitas 240
QY 241 RRHFPNCPPFLENSLTLRESISLNSMOTHARMRTFMWPPSSVPVOPEQLASAGFPYVGR 300
XX
PR (UOTC-) UNIV OTTAWA.
XX
PI Baird S, Korneiuk R, Liston P, Mackenzie AE, Pratt C;
PR Tsang B;
PR DR WPI; 1998-457154-40.
N-PSDB; AA7705040.
XX
PS Inducing apoptosis in proliferative mammalian cells with inhibitor of IAP or NAIP polypeptide - also methods for prognosis based on presence of IAP and NAIP, specifically applied to cancers involving P53 mutations
XX
Disclosure; Fig 3; 147PP; English.

CC This sequence is the human XIAP-2 protein, which is a inhibitor of apoptosis protein (IAP), and can be used in the method of the invention. The method is for enhancing apoptosis in cells from a mammal with proliferative disease by treatment with a compound that inhibits biological activity of an IAP or NAIP polypeptide. The inhibitory compounds are used to treat proliferative diseases, specially cancers of ovary, breast, pancreas, lymph nodes, skin, blood, lung, brain, kidney,

Db 241 rhtnprcpflehsletlrfishlsinqthaarmrtmypsstvppqeqasagYyygr 300
QY 301 NDDYKRCFCDGGLRCWESDDPWRHAKWPFRCERLIRKGDFEDEIQGPHFELQI 360
Db 301 nddktcigcdgqllrcwesddpwrhakwtfrcerlirkmggefvdelqgrphfleqii 360
QY 361 STSOTTGGENAPPTIHFPGFESSEDDMVNTPVKSALEMGRNFDLWVKTWSKLT 420
Db 361 |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| 420
Db 361 SLSQTYGenaappiLhpgesessgavimnlpvksaIengfrdavkvqkvslit 420
QY 421 GENKTYKVDIVSALINADEKREBEKEQAFEMASDLSLIRNRMALFOOTCVLPIFD 480
Db 421 gnyktndi:salinaedekrekeekqaceamaddisilrnmalEqgtexplpid 480
QY 481 NLKAKVNVINKDHDIKTQIQTQIQLQABELQIOLIVLPGNAAANTFKNKEIDSTYKLF 540
Db 481 nlkakvnkqkqhdikqptqipqareliqtwkqgnaanffknkeidstlykulf 540
QY 541 VDKNMKQIPTEDVSGSLERQIRLQEROERTCKVCMKDESVWTFPCOHLWVQECAPSRL 600
Db 541 vdkmkqkqhdikqptqipqareliqtwkqgnaanffknkeidstlykulf 600
QY 601 KCPICRGIGKQYRPEFLS 618
Db 601 kcpicrgigkqyrtfls 618

CC	liver, nasopharynx, thyroid, central nervous system, prostate, colon, rectum, cervix or endometrium, particularly to increase their sensitivity to chemotherapeutic agents. High levels of the IAP or NAIP proteins are detected in many cancers and are associated with poor prognosis, resistance to chemotherapeutic agents and mutations in p53 (it is suggested that wild-type p53 up-presses transcription of the IAP or NAIP genes). Transgenic animals are used for testing the effects of antisense oligonucleotides and for screening for the inhibitors.
XX	Sequence 618 AA;
Query Match	99.1%; Score 3247; DB 19; length 618;
Best Local Similarity	99.4%; Pred. No. 7.2e-287;
Matches	614; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY	1 MHTASORLPGPSQNIKSIMEDSTLSPNLSKQKVDSCYLYRMSYSPFAGY 60
Db	1 mhtasqrllpgpsqniksimedstlspnlskqkvdscylyrmtystpgry 60
QY	61 PVSERSLARAGFYTGVDKVKFCGCCIMLWNKQGDSPIQKHLQVPSCSFTIONVLSA 120
Db	61 pvserslarqfytgvdnkvcgkfcgmlndnkqdgspikqlypcsfepilvs 120
QY	121 LGSTSKNTSPRNFAHSLSPLTEHSSLFSQSYSSLSPWLNRAVEDISSRTNPSA 180
Db	121 lgstskntspnfahslspltehsslfssqsysspphplnsravedissrtnpsa 180
QY	181 M\$P\$E\$A\$P\$F\$Y\$H\$M\$P\$T\$F\$P\$S\$E\$P\$S\$E\$A\$R\$A\$G\$F\$Y\$T\$G\$P\$D\$R\$V\$A\$C\$F\$A\$C\$G\$K\$S\$N\$W\$P\$R\$D\$M\$E\$H 240
Db	181 m\$P\$E\$A\$P\$F\$Y\$H\$M\$P\$T\$F\$P\$S\$E\$P\$S\$E\$A\$R\$A\$G\$F\$Y\$T\$G\$P\$D\$R\$V\$A\$C\$F\$A\$C\$G\$K\$S\$N\$W\$P\$R\$D\$M\$E\$H 240
QY	241 R\$H\$P\$P\$C\$C\$P\$E\$N\$S\$T\$L\$P\$R\$S\$H\$S\$M\$O\$T\$H\$A\$R\$M\$R\$F\$Y\$M\$P\$S\$Y\$P\$Q\$E\$O\$L\$A\$S\$A\$G\$Y\$V\$G\$R 300
Db	241 rh\$hp\$pc\$pe\$ns\$tl\$pr\$sh\$sm\$ot\$ha\$rm\$rf\$ym\$ps\$y\$p\$qe\$la\$sa\$g\$y\$vr 300
QY	301 N\$D\$Y\$K\$C\$C\$D\$G\$L\$R\$W\$E\$G\$D\$P\$W\$H\$E\$A\$K\$W\$F\$C\$E\$F\$R\$M\$G\$Q\$F\$E\$D\$O\$G\$R\$Y\$H\$U\$Q\$L 360
Db	301 nd\$yk\$cc\$dg\$lr\$we\$gd\$pw\$eh\$kw\$fc\$ef\$rm\$g\$q\$fd\$iq\$y\$ph\$le\$il 360
QY	361 S\$T\$D\$T\$G\$E\$E\$N\$A\$D\$P\$P\$L\$H\$F\$G\$E\$S\$S\$E\$D\$A\$V\$M\$N\$T\$P\$V\$S\$A\$L\$E\$M\$G\$F\$N\$R\$D\$Y\$K\$V\$O\$S\$K\$H\$T 420
Db	361 st\$dt\$te\$en\$ad\$pp\$hp\$fg\$es\$se\$av\$mt\$pv\$ks\$al\$mg\$fr\$dk\$y\$kv\$sk\$ht 420
QY	421 G\$E\$N\$Y\$K\$T\$V\$N\$D\$T\$V\$S\$A\$L\$A\$N\$A\$E\$K\$R\$E\$E\$K\$Q\$A\$E\$M\$A\$S\$D\$S\$U\$R\$K\$R\$M\$A\$F\$Q\$O\$T\$C\$V\$U\$P\$T\$D 480
Db	421 gen\$yt\$vd\$nt\$vs\$al\$na\$ed\$ek\$re\$ek\$eq\$ea\$mas\$dl\$irk\$rm\$al\$fg\$it\$ev\$pl\$ld 480
QY	481 N\$L\$K\$A\$N\$Y\$K\$N\$O\$H\$D\$K\$O\$X\$T\$Q\$P\$Q\$A\$E\$L\$T\$Y\$L\$W\$G\$N\$A\$A\$N\$F\$K\$N\$C\$K\$E\$D\$T\$Y\$K\$N\$F 540
Db	481 nl\$kan\$an\$y\$kn\$oh\$dk\$ox\$tp\$qp\$qa\$el\$it\$ly\$w\$gn\$aa\$nf\$kn\$ce\$kd\$ty\$kn\$f 540
QY	541 V\$D\$K\$M\$K\$Y\$P\$T\$D\$Y\$S\$U\$S\$U\$B\$E\$Q\$U\$R\$Q\$O\$E\$R\$T\$K\$Y\$C\$K\$Y\$E\$S\$Y\$V\$F\$P\$G\$H\$U\$W\$Q\$C\$A\$P\$S\$R 600
Db	541 vdk\$mk\$y\$pt\$dy\$ss\$us\$ub\$eq\$ur\$qr\$o\$er\$tk\$y\$ck\$y\$e\$sv\$fp\$gh\$uw\$qc\$aps\$rl 600
QY	601 K\$C\$P\$C\$R\$K\$T\$K\$T\$V\$R\$P\$S 618
Db	601 kcp\$cr\$kt\$kt\$tv\$rp\$sl 618
RESULT	6
ID	AAW13555 standard; Protein: 612 AA.
XX	AAW13555;
AC	AAW13555;
XX	22-JUL-1997 (first entry)
DT	Murine c-IAP.
XX	IAP: inhibitor; apoptosis; RING finger domain; restinosis; myocardial infarction; nephritis; HIV.

SO	Sequence	612 AA:
Db	354	stadtgeenadaptetvhqpg-ssdvwimstpvkaalengfrslvrgvql 412
Qy	419	TGEGYKVNDIVSALNAEDEKKEREEQKREMASDSDLRKRMALFOQLCULP 478
Db	413	atgenyrtvndivsvlinaeddeereekerqteemagdsilirknmalfqdlthvpi 472
Qy	479	LDNLKANVINKOQHDKTQPIQARLEDTLVKGNAANIFKNCLEKEDSTLYKN 538
Db	473	ldnleasitkgehdirkqtqplqarelditvkgnaanaiiknsikeldstjen 532
Qy	539	LFVDKMKVYIPTEDVSGLSFEEQRRLQERTRCKVCMKDEKEYSVWIPCPHTLVQCBAPS 598
Db	533	lvekmykypedevsglsleqrlqteertrckvcmndrevsivfpcghlvwqecaps 592
Qy	599	LRKCPICRGYKGTVRFLS 618
Db	593	lrkcpicrgtikgtvrtfls 612
RESULT	7	
AWB65299	AAWG9299	standard: Protein; 612 AA.
ID	AAWG9299	
XX	XX	
AC	AAWG9299:	
XX	13-NOV-1998	(first entry)
DE	Murine HIAP-2 protein.	
XX		
KW	Inhibitor of apoptosis protein; apoptosis enhancer; NAIP polypeptides; proliferative disease; IAP; therapy; cancer; mouse; HIAP-2 protein.	
XX		
OS	Mus sp.	
XX		
PN	W09835693-A2.	
PD	20-AUG-1998.	
XX		
PI	13-FEB-1998; 98WO-1B0078B1.	
XX		
PR	13-FEB-1997; 97US-0800929.	
XX		
PA	(UOTC) UNIV OTAWA.	
PI	Baird S, Korneluk R, Liston P, Mackenzie AE, Pratt C; Tsang B;	
XX		
DR	WPI; 1998-467164/40.	
XX		
PR	Inducing apoptosis in proliferative mammalian cells with inhibitor of IAP or NAIP polypeptides - also methods for prognosis based on presence of IAP and NAIP, specifically applied to cancers involving P53 mutations	
XX		
PS	disclosure; Fig 6; 147pp; English.	
XX		
CC	This sequence is the murine HIAP-2 protein, which is a inhibitor of apoptosis protein (IAP), and can be used in the method of the invention. The method is for enhancing apoptosis in cells from a mammal with proliferative disease by treatment with a compound that inhibits biological activity of an IAP or NAIP polypeptide. The inhibitory compounds are used to treat proliferative diseases, specially cancers of ovary, breast, pancreas, lymph nodes, skin, blood, lung, brain, kidney, liver, nasopharynx, thyroid, central nervous system, prostate, colon, rectum, cervix or endometrium, particularly to increase their sensitivity to chemotherapeutic agents. High levels of the IAP or NAIP proteins are detected in many cancers and are associated with poor prognosis, resistance to chemotherapeutic agents and mutations in P53 (it is suggested that wild-type P53 suppresses transcription of the IAP or NAIP genes). Transgenic animals are used for testing the effects of antisense oligonucleotides and for screening for the inhibitors.	
PS		
RESULT	8	
ID	AW19586	
XX	AAW19586	standard: Protein; 591 AA.
AC	AAW19586;	
XX		
CC	Mouse apoptosis inhibitor M-HIAP-2.	
DT	02-SEP-1997	(first entry)
DE	Apoptosis inhibitor; M-HIAP-2; HIV; AIDS; neurodegeneration; myelosplastic syndrome; ischaemia; myocardial infarction; stroke; reparation injury; toxin-induced liver disease; gene therapy; diagnosis.	
XX		
KW		
OS	Mus sp.	
XX		
PH	Key	
FT	Location/Qualifiers	
FT	/label= BIR-1	

FT	Domain	156..222
FT		/label= BIR-2
FT		241..308
FT	Domain	541..578
FT		/label= Ring-zinc_finger
PN	W09706255-A2.	
XX	XX	
PD	20-FEB-1997.	
PF	05-AUG-1996;	96WO-1B01022.
XX	XX	
PR	22-DEC-1995;	95US-0576956.
PR	04-AUG-1995;	95US-0511485.
XX	XX	
PR	(UROT-)	UNIV OTTAWA.
XX	XX	
PI	Baird S, Korneluk RG, Liston P, Mackenzie AB;	
XX	XX	
DR	WPI; 1997-15-262/14.	
N-PSB;	AMT/0841.	
XX	XX	
PT	Nucleic acid encoding an inhibitor of apoptosis polypeptide - used to inhibit apoptosis in e.g. HIV or AIDS patients, and for detection of susceptibility to apoptotic disease	
PT		
PS	Claim 30; Page 100-102; 219pp; English.	
XX	XX	
CC	Human XIAP, XIAP-1 and XIAP-2 and murine XIAP, mXIAP-1 and mXIAP-2 (AAW19581-86) are a new class of mammalian proteins that are inhibitors of apoptosis (IAP) and which are characterised by the presence of a ring zinc finger domain (see also AAW19587) and at least one BIR (baculovirus IAP repeat) domain (see also AAW19588). The mXIAP amino acid sequences were deduced from isolated mXIAP cDNA clones (AMT/0840-41). IAP polypeptides can be expressed in host cells (in vitro or in vivo) and used in methods for treating diseases and disorders involving apoptosis, esp. in a human diagnosed as HIV-positive or as having AIDS, a neurodegenerative disease, a myelodysplastic syndrome or an ischaemic injury, selected from myocardial infarction, stroke, reperfusion injury, or a toxin-induced liver disease.	
CC		
XX		
SO	Sequence 591 AA;	
RESULT 9		
ID	AAW19747	
ID	AAW19747 standard; Protein; 604 AA.	
XX	XX	
AC	AAW19747;	
XX	XX	
DT	16-SEP-1997 (first entry)	
XX	XX	
DE	Human inhibitor of apoptosis protein homologue XIAP.	
XX	XX	
KW	Inhibitor of apoptosis protein; IAP; mammalian IAP homologue; XIAP; degenerative disease; infectious disease; autoimmune disease; cancer; therapy; diagnosis.	
XX	XX	
OS	Homo sapiens.	
XX	XX	
Key	Location/Qualifiers	
FT	29..97	
FT	/label= BIR	
FT	Region 169..236	
FT	/label= BIR	
FT	Region 255..323	
FT	/label= BIR	
FT	Region 536..593	
FT	/label= Ring_finger	
XX	XX	
PN	W09723501-A1.	
XX	XX	
PD	03-JUL-1997.	
XX	XX	
PR	20-DEC-1995;	96WO-AU00827.
XX	XX	
PR	22-DEC-1995;	95AU-0007275.
PR	(AMRA-)	AMRAD OPERATIONS PTY LTD.
XX	XX	
PT	Vaux DL;	
XX	XX	
DR	WPI; 1997-35096/32.	
N-PSB;	AMT/2712.	
XX	XX	
PT	Isolated protein homologues of viral inhibitors of apoptosis - used to modulate apoptosis for treatment of degenerative, infectious or autoimmune diseases and cancer	
PT		
PS	Claim 9; Page 58-62; 136pp; English.	
XX	XX	
CC	Mammalian IAP homologue C (XIAP) is a human homologue of mammalian IAP inhibitor of apoptosis protein (IAP). Its amino acid sequence was deduced from a cDNA clone (see also AMT/2712) isolated from a human foetal liver cDNA library using primers based on human EST sequences that resembled the BIR repeats of Oryzias pseudotauriata polyhedrosis virus IAP. IAP homologues (see also AMW1945-47 and their derivatives and chemical analogues can be used in methods for modulating apoptosis in animal	
CC		

CC	cells, specifically for treatment, by inhibition, of degenerative
CC	and infectious disease or, by promotion, of cancer and autoimmune
CC	disease.
XX	
SO	Sequence 604 AA:
Query Match	71.8%; Score 2353; DB 18; length 604;
Best Local Similarity	72.0%; Pred. No. 2.1e-205;
Matches	440; Conservative 71; Mismatches 87; Indels 6; Gaps 5;
DB	
OY	20 SIMEDSTLSDWNTS-NKOKMKYDPSCLERYMSTSPAGVYNSERSLARAGFYVTGVN 78
DB	2 nvensiflsmkantfeikyalscelyrmtystfpagvpsvrsaragfyvtgvn 61
OY	79 DKVKFCGGLMDNWKLGDSPIOKHQLYPSCTQNLVSA-SLOSTSKNTSP--MRSNF 135
DB	62 dkvcfcfcgimdnwkgdsgpteknikklypsctfvgqsvnsynvnlleatsqptfpssvts- 120
OY	136 AHISPLTEHSSLFSGSYSSLSPLNRAVEDISSRTNPSYAMSTEARFLYHMP 195
DB	121 thalpgeutsgyftrgyspspsvnspsvnsrangtsalmrssyhcammnarltfqwt 180
OY	196 LTRSPSLARAGFYIGGRVACAGGKLSNWEKDAMSERRRHFCPCPFLNSL- 234
DB	181 tlfspidlaqkagyipgdrvacagggksnwepkdamserrrhfcpcpflnq 240
OY	255 ETURFSISNLSMOTHAARMTRMMPSSWVPSVPOEQLASAGFYVGRNDYKFCGCGGR 314
DB	241 dtrytvsnsqtharftkfmpwssvlpnpeqisagfyygnsdtkfcfcgqir 300
OY	315 CWESGDPWVHEAKWPRCFLIRMKQGEOFVDEIOPGRPHILEQOLISTSOTGENADPP 374
DB	301 cwesgddpawqhakwprceylirkqgeffirqvqasphyllqsltsdpgdenass 360
OY	375 LTRGPBESSSDAVANTPVVKSALENGFNRDVKQTVOSKLTGENYKTVDIVSL 434
DB	361 lhfpednsedalmnlpviavengfsrlvqtkrklatgenyrlvndivid 420
OY	435 LNAEDEEREEKEQAEEMASDPLSLRKNRMLFOOLTCULPLDNLKANVINKQHD 494
DB	421 lhnedelreereererateekesndnlkrrnmalqhtcvipilidsltagineghd 480
OY	495 ITRKQKTRPLRRELUTIVKGNAAINFKNQKIKEDSTYKLNFLVDKMKYIPTEDS 554
DB	481 vikqktqtsqarelalitvkgnlaatvrtuslaeqeavlyehlrvqqdkypteds 540
OY	555 GSLEQBLRRLQEFERTRVKYDKEVSVWVTPQCHLWVQCBAPSLRKCPGTRGKTVR 614
DB	541 dpyeedkrirgeetckvnlmdkevsvifpcqhvckdcapsitkcpistklyvr 600
OY	615 TFLS 618
DB	601 tfls 604
RESULT	10
AAW13546	
ID	AAW13546 standard; protein; 604 AA.
XX	
AAW13546;	
XX	
DT	22-JUL-1997 (first entry)
XX	
Human	c-IAP2.
XX	
IAP; Inhibitor; apoptosis; RING finger domain; restinosis;	
XX	
myocardial infarction; nephritis; HIV; Homo sapiens.	
XX	
OS	
PN	W09706182-A1.
XX	
PD	20-FEB-1997.
XX	
RF	06-AUG-1996; 96W0-US12860.
XX	
PR	08-DEC-1995; 96US-0569749.
XX	
PA	08-AUG-1995; 95US-0512946.
XX	
PI	(TULA-) TULARIK INC.
XX	
Goeddel DV, Rothe M;	
XX	
DR	WPI: 1997-15420974.
DR	N-PSDB; AAW13591.
PS	
XX	
PT	Nucleic acids encoding cellular inhibitor of apoptosis proteins -
CC	useful for apoptosis regulation in cells to reduce or increase
PT	apoptosis and for pharmacological screening
XX	
Disclosure:	Page 21-23; 35pp; English.
XX	
The human cellular inhibitor of apoptosis proteins (c-IAP1/2 -	
AAW13507/761591) comprise a series of defined structural domain	
repeats and/or a RING finger domain. In particular, at least two of	
CC	a first domain repeat (AAW13547 or AAW13558), a second domain repeat
CC	(AAW13549 or AAW13550), and a third domain repeat (AAW13551 or AAW13552)
CC	and/or a RING finger domain (AAW13553 or AAW13554), or a consensus
CC	sequences derived from these human genes.
CC	The nucleic acid is used for recombinant prod. of human cellular
CC	inhibitor of apoptosis protein which modulates apoptosis
CC	regulation. The nucleic acids are useful in therapies where
CC	increased cell-specific apoptosis is desired, e.g. in restinosis,
CC	inflammatory disease states, myocardial infarction, glomerular
CC	nephritis, transplant rejection and infectious diseases, e.g. HIV.
CC	They can also be used in conditions requiring a reduction in
CC	apoptosis.
XX	
Sequence	604 AA:
Query Match	71.8%; Score 2353; DB 18; length 604;
Best Local Similarity	72.0%; Pred. No. 2.1e-205;
Matches	440; Conservative 71; Mismatches 87; Indels 6; Gaps 5;
DB	
OY	20 SIMEDSTLSDWNTS-NKOKMKYDPSCLERYMSTSPAGVYNSERSLARAGFYVTGVN 78
DB	2 nvensiflsmkantfeikyalscelyrmtystfpagvpsvrsaragfyvtgvn 61
OY	79 DKVKFCGGLMDNWKLGDSPIOKHQLYPSCTQNLVSA-SLOSTSKNTSP--MRSNF 135
DB	62 dkvcfcfcgimdnwkgdsgpteknikklypsctfvgqsvnsynvnlleatsqptfpssvts- 120
OY	136 AHISPLTEHSSLFSGSYSSLSPLNRAVEDISSRTNPSYAMSTEARFLYHMP 195
DB	121 thalpgeutsgyftrgyspspsvnspsvnsrangtsalmrssyhcammnarltfqwt 180
OY	196 LTRGPBESSSDAVANTPVVKSALENGFNRDVKQTVOSKLTGENYKTVDIVSL 434
DB	181 tlfspidlaqkagyipgdrvacagggksnwepkdamserrrhfcpcpflnq 240
OY	315 CWESGDPWVHEAKWPRCFLIRMKQGEOFVDEIOPGRPHILEQOLISTSOTGENADPP 374
DB	301 cwesgddpawqhakwprceylirkqgeffirqvqasphyllqsltsdpgdenass 360
OY	375 LTRGPBESSSDAVANTPVVKSALENGFNRDVKQTVOSKLTGENYKTVDIVSL 434
DB	361 lhfpednsedalmnlpviavengfsrlvqtkrklatgenyrlvndivid 420
OY	435 LNAEDEEREEKEQAEEMASDPLSLRKNRMLFOOLTCULPLDNLKANVINKQHD 494

DR	WPI: 1998-467164/40.
DR	N-PSDB; RAV55033.
XX	Inducing apoptosis in proliferative mammalian cells with inhibitor of IAP or NAIP polypeptide - also methods for prognosis based on presence of IAP and NAIP, - specifically applied to cancers involving p53 mutations
XX	Disclosure: Fig 2; 14pp: English.
XX	This sequence is the human HAP-1 protein, which is a inhibitor of apoptosis protein (IAP), and can be used in the method of the invention. The method is for enhancing apoptosis in cells from a mammal with proliferative disease by treatment with a compound that inhibits biological activity of an IAP or NAIP polypeptide. The inhibitor compounds are used to treat proliferative diseases, especially cancers of ovary, breast, pancreas, lymph nodes, skin, blood, lung, brain, kidney, liver, nasopharynx, thyroid, central nervous system, prostate, colon, rectum, cervix or endometrium, particularly to increase their sensitivity to chemotherapeutic agents. High levels of the IAP or NAIP proteins are detected in many cancers and are associated with poor prognosis, resistance to chemotherapeutic agents and mutations in p53 (it is suggested that wild-type p53 suppresses transcription of the IAP or NAIP genes). Transgenic animals are used for testing the effects of antisense oligonucleotides and for screening for the inhibitors.
XX	Sequence 604 AA:
Query	Match 71.2%; Score 2332; DB 19; length 604; Best Local Similarity 72.1%; Pred. No. 1; 7e-203; Matches 435; Conservative 72; Mismatches 92; Indels 4; Gaps 2
Db	2 nvensifislnmsantsfekydkiselymstystpagvpserslaragyytgvn 61
Query	79 DKVKFCGCCUNLWKGDSDIQLKIKQIPLPSRSRNPYVSA- SUGSTSNTSPMRVSA- 136
Db	62 dkycfcgalmidnkwdqsdtekikklypscfvqsglnsnmleatsoptfpssrhst 121
Query	137 HSUPLTEHSSLSGSVSSUSPNPNSRAVEDISSRTNPYVSA- NAMSTEARFLTYHNPPL 196
Db	122 hslpgtengsryfgysnspsnprnstrangefslmssypcnnanarilftqtwpl 181
Query	197 TFLSSELARAGYYIPLGPNVAGCAGKSLWEPDAMSERHRRHNPCLPESL-E 255
Db	182 tflspdtlaragyyiplgpfactacaggkiswepkdnamsrehrlhfpctpienqlqd 241
Query	256 TFLSISLNSMOTHAAMRTMPYVSSVVPOLASAGGYVVERNDVCKCFCGGLRC 315
Db	242 ttrytvsosmqaafkftfnwpsvsvipnplasqasfyygvsddkscccdgirc 301
Query	316 WESGDPWYEHAPWPERCEFLRGMQBEVDEIOPHRPHLBSLSTSPTGEENDPPI 375
Db	302 wsgodpwqhwkawpfcyelirkqgqefqgqasqyphileqslstdspgdenessi 361
Query	376 IHFGGESESSDADVMMMPVVKSALEMGRNDLKVOKVOSKLTGENVKTVDINSSL 435
Db	362 ihlpegesisdedimmtpvinaavengfrs.vkqvgqkrlatgengyrlvdli 421
Query	436 NADERKESEKEQAEAMMSDLSLIRKFMALFQOLTCVPLIQLNLKANVINKQHDI 495
Db	422 nadereererateekeskdlirkormalffqhtivipilsltdtaginejhdv 481
Query	496 IKQKQIPLQARSLIDILVGMANRINKCIEKUSTYKMFUDKMKVYPTEDVG 555
Db	482 ikqktqtslqareidtlivkgnaatvfrnslqeaavlyhlfqdkyiptcsdsvd 541
Query	556 LSLERQRLUOERTCVCWCKOKESSWVFPGCHLWVOCESPKSPLKPCPGRGIKQGRT 615
Db	542 lpeeqqrirpeertckvcmekersivfpcgllwckdeapskirkpcrstikjvt 601

QY 616 FLS 618
Db 602 f1s 604

RESULT 15

AAW04583 standard; Protein; 438 AA.
ID AAW04583
AC AAW04583:
XX 07-FEB-1997 (first entry)
DE Human inhibitor of apoptosis gene 1.
XX
KW Inhibitor of apoptosis 1; hIAP-1; degenerative disease;
KW rheumatoid arthritis; septic shock; antiviral; trauma; stroke;
KW cell death; oncogenesis; cancer; diagnosis; therapy.
XX
OS Homo sapiens.
XX
PN W09635703-A1.
XX
PD 14-NOV-1996.
PF 11-MAY-1995; 95W0-US05922.
PR 11-MAY-1995; 95W0-US05922.
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI He WW, Hudson PL, Rosen CA;
XX
DR WPI; 1996-518608/51.
DR N-PSDB: AAT43709.
XX
PT Polynucleotide encoding human inhibitor of apoptosis gene 1 - useful
PT for treating degenerative diseases, as antiviral defence mechanism
PT and preventing cell death during trauma and strokes
XX
PS Claim 1; Page 40-41; 53pp; English.
XX
Human inhibitor of apoptosis 1 (hIAP-1) (AAW04583) is a protein,
useful for treating degenerative diseases, rheumatoid arthritis,
septic shock, as an antiviral defence mechanism, and for
preventing cell death during strokes or trauma. Its amino acid
sequence was deduced from a cDNA clone (AAT43709) that can be obt'd.
from human Jurkat cell lines or human osteoclastoma stromal cell
lines. Recombinant hIAP-1 can be produced in prokaryotic or
eukaryotic host cells, or expressed in vivo. It can also be used
to screen for modulators of hIAP-1 activity.
XX
Sequence 438 AA:

Query Match 71.0%; Score 2326; DB 17; Length 438;
Best Local Similarity 100.0%; Pred. No. 3 Ge 203; Matches 438; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 181 MSTEREARFLYHMMPLFLSPSELARAGAYTGPGRDVAFCAGGRKLSWNPDDAMSEH 240
Db 1 msteararfltyhmmplflspselaragaytgpgrdvafcaggrklswnpddamseh 60
QY 241 RRHFPNCPELPLENSLETIRFSISNLNSMOTHAAHMRTEWMWPSSPVWPEOPLASAGFYVGR 300
Db 61 rrhfpncpelelplensletirfsisnlsmothaahtmrtewmwpsspvwpqgledasgfyvgr 120
QY 301 NDDVKCFCGCGURCWSGGDPWELAKKEPREFLIRMKQOEFVDEIQRPHLSEQL 360
Db 121 ndavkfcgggrcwsggdpwvhakvprcfelirmkqgevdelsgryphileqii 180
QY 361 SNSDTGEENADPPIIRGPQESSEDAYWMNPVVKSALEMGMFRDLYKQTYQSKLTT 420

Db 181 sssdttgeenadpplihtgpgesssdavmntrvksalemgfnrdlykqtvqsklitt 240
QY 421 GEMVKVNDYVSLINADEKEKEKEKQAEEMADSLSIRKRNALFCQDQTCVPLID 480
Db 241 genktyvdvslinadekreekekqaeemadsdlirkntmalfqitcvplid 300
QY 481 NLLKANVINKOEHDIKOTPLDORELUDTIVGKNAAMTIEKUCLKIDSPUYKULF 540
Db 301 nllkanvinkoehdiqktpqgarelditivgknaamtknckleidstlykif 360
QY 541 VDNMKVYPTEDVSLSLREQRFLBERICKVMDKEVSVVPIFGHLYVCOPCAPSLR 600
Db 361 vdkmkvypedvsglseqrlqerctkvmdkevsvvlpoghlwqeqapslr 420
QY 601 KCPICRGIKNTVRLFLS 618
Db 421 kcpicrgiikqtvrlfls 438

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